

cite  
102(b)[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)**End of Result Set**

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L6: Entry 1 of 1

File: USPT

Dec 4, 2001

US-PAT-NO: 6327522

DOCUMENT-IDENTIFIER: US 6327522 B1

TITLE: Display apparatus for vehicle

DATE-ISSUED: December 4, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kojima; Koichi	Hiroshima-ken			JP
Uemura; Hiroki	Hiroshima-ken			JP
Sasaki; Hidekazu	Hiroshima-ken			JP
Doi; Ayumu	Hiroshima-ken			JP

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Mazda Motor Corporation	Hiroshima-ken			JP	03

APPL-NO: 09/ 596860 [PALM]

DATE FILED: June 19, 2000

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	11-253309	September 7, 1999
JP	11-253310	September 7, 1999
JP	11-253313	September 7, 1999

INT-CL: [07] G09 G 5/00, G06 G 7/78

US-CL-ISSUED: 701/1; 701/96, 701/300, 348/115

US-CL-CURRENT: 701/1; 348/115, 701/300, 701/96

FIELD-OF-SEARCH: 701/1, 701/96, 701/300, 701/301, 701/28, 340/903, 340/937, 340/943, 340/435, 340/436, 348/115, 348/118, 348/119

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

<input type="checkbox"/>	<u>4833469</u>	May 1989	David	340/901
<input type="checkbox"/>	<u>5646639</u>	July 1997	Koie	345/7
<input type="checkbox"/>	<u>5661454</u>	August 1997	Bezard et al.	340/461
<input type="checkbox"/>	<u>5793308</u>	August 1998	Rosinski et al.	340/903
<input type="checkbox"/>	<u>5821867</u>	October 1998	Angell et al.	340/815.45
<input type="checkbox"/>	<u>5883739</u>	March 1999	Ashihara et al.	359/462
<input type="checkbox"/>	<u>5983161</u>	November 1999	Lemelson et al.	701/301
<input type="checkbox"/>	<u>6014608</u>	January 2000	Seo	701/207
<input type="checkbox"/>	<u>6072391</u>	June 2000	Suzuki	340/468
<input type="checkbox"/>	<u>6108031</u>	August 2000	King et al.	348/118

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
60231193	November 1985	JP	
6247184	September 1994	JP	
10148537	June 1998	JP	
10230805	September 1998	JP	

ART-UNIT: 361

PRIMARY-EXAMINER: Nguyen; Tan

ASSISTANT-EXAMINER: Tran; Dalena

ATTY-AGENT-FIRM: Brooks &amp; Kushman P.C.

## ABSTRACT:

In a display apparatus for a vehicle, when an auto mode is selected, an obstacle closest to the vehicle is determined on the basis of data that represents an output signal from an obstacle sensor, the determined obstacle and a radiation heat source (pixel group) included in an image sensed by an infrared light camera are associated with each other, and only an image corresponding to the obstacle closest to the vehicle is displayed on a display (FIG. 2, S5-S7).

18 Claims, 34 Drawing figures

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L6: Entry 1 of 1

File: USPT

Dec 4, 2001

DOCUMENT-IDENTIFIER: US 6327522 B1

TITLE: Display apparatus for vehicle

Application Filing Date (1):

20000619

Detailed Description Text (111):

As an example of the processing in this step, the CPU 101 estimates the traveling direction of the vehicle (predicted route along which the vehicle is expected to travel) on the basis of data representing the output signals from the vehicle velocity sensor 24 and steering angle sensor 25 acquired in step S125, and compares position data obtained by coordinate conversion of the position data of the obstacle detected by the obstacle sensor 22 in the previous control period onto the coordinate system of the estimated traveling route, and the position data of that obstacle acquired in step S125 in the current control period.

Detailed Description Text (112):

As a result of comparison, if the two position data on that coordinate system indicate an identical location, it can be determined that the obstacle stands still; if they indicate different locations, it can be determined that the obstacle is moving. Furthermore, if the obstacle is moving, the CPU 101 checks if the direction of a velocity vector represented by these two position data is approaching the traveling route computed in this step, thus determining if the obstacle and vehicle are moving in directions in which they relatively approach each other.

Current US Original Classification (1):

701/1

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L9: Entry 6 of 9

File: USPT

Jul 19, 1994

US-PAT-NO: 5331561

DOCUMENT-IDENTIFIER: US 5331561 A

TITLE: Active cross path position correlation device

DATE-ISSUED: July 19, 1994

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Barrett; William A.	Shorewood	MN		
Krantz; Donald G.	Eden Prairie	MN		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Alliant Techsystems Inc.	Hopkins	MN			02

APPL-NO: 07/ 872497 [\[PALM\]](#)

DATE FILED: April 23, 1992

INT-CL: [05] G06G 7/64, G08G 1/16

US-CL-ISSUED: 364/447; 364/424.01, 364/460, 342/95, 340/903

US-CL-CURRENT: 701/205; 340/903, 342/95, 701/1, 701/300, 701/96

FIELD-OF-SEARCH: 364/447, 364/424.02, 364/460, 364/461, 364/443, 342/29, 342/41, 342/455, 342/456, 342/95, 180/170, 340/901, 340/902, 340/903

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>4328545</u>	May 1982	Halsall et al.	364/424.02
<input type="checkbox"/> <u>4578757</u>	March 1986	Stark	364/461
<input type="checkbox"/> <u>4626995</u>	December 1986	Lofgren et al.	364/424
<input type="checkbox"/> <u>4703429</u>	October 1987	Sakata	364/426
<input type="checkbox"/> <u>4757450</u>	July 1988	Etoh	364/426
<input type="checkbox"/> <u>4802096</u>	January 1989	Hainsworth et al.	364/461
<input type="checkbox"/> <u>4853863</u>	August 1989	Cohen et al.	364/460

<input type="checkbox"/>	<u>4855915</u>	August 1989	Dallaire	364/424.02
<input type="checkbox"/>	<u>4905151</u>	February 1990	Weiman et al.	364/424.02
<input type="checkbox"/>	<u>4939651</u>	July 1990	Onishi	364/424.02
<input type="checkbox"/>	<u>5053979</u>	October 1991	Etoh	364/565
<input type="checkbox"/>	<u>5155684</u>	October 1992	Burke et al.	364/424.02
<input type="checkbox"/>	<u>5163004</u>	November 1992	Rentz	364/460

ART-UNIT: 234

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Nguyen; Tan Q.

ATTY-AGENT-FIRM: Merchant, Gould, Smith, Edell, Welter & Schmidt

ABSTRACT:

A system guides a vehicle along a predefined path by correlating vehicle side range profiles. A lead vehicle gathers side range data using active radiation sources such as light emitting diodes. A microprocessor-based system on board the lead vehicle stores the data into records of a database file, tagging each record to indicate a relative position along the path when the lead vehicle obtained the data. A system on board a follower vehicle gathers its own side range data and also generates a side range profile for the follower vehicle. The follower vehicle's system receives by radio communication the side range profiles from the lead vehicle and, using the tagging information, correlates these profiles with the follower vehicle side range profiles at appropriate points along the path. As a result of the correlation, the follower vehicle's system outputs commands to actuators coupled to the vehicle's steering system, throttle, and braking system to control the vehicle's motion so that the vehicle traverses the predefined path.

28 Claims, 11 Drawing figures

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### Search Results - Record(s) 1 through 9 of 9 returned.

☐ 1. Document ID: US 6487495 B1

L9: Entry 1 of 9

File: USPT

Nov 26, 2002

US-PAT-NO: 6487495

DOCUMENT-IDENTIFIER: US 6487495 B1

TITLE: Navigation applications using related location-referenced keywords

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 2. Document ID: US 6282460 B1

L9: Entry 2 of 9

File: USPT

Aug 28, 2001

US-PAT-NO: 6282460

DOCUMENT-IDENTIFIER: US 6282460 B1

TITLE: Method for programming a robot using a pendant controller

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 3. Document ID: US 6104970 A

L9: Entry 3 of 9

File: USPT

Aug 15, 2000

US-PAT-NO: 6104970

DOCUMENT-IDENTIFIER: US 6104970 A

TITLE: Crawler inspection vehicle with precise mapping capability

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 4. Document ID: US 5798627 A

L9: Entry 4 of 9

File: USPT

Aug 25, 1998

US-PAT-NO: 5798627

DOCUMENT-IDENTIFIER: US 5798627 A

TITLE: Method for simultaneous operation of robot welders

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Abstract	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 5526260 A

L9: Entry 5 of 9

File: USPT

Jun 11, 1996

US-PAT-NO: 5526260

DOCUMENT-IDENTIFIER: US 5526260 A

TITLE: Device executing intervisibility calculation

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Abstract	Claims	KWIC	Draw. De
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☐ 6. Document ID: US 5331561 A

L9: Entry 6 of 9

File: USPT

Jul 19, 1994

US-PAT-NO: 5331561

DOCUMENT-IDENTIFIER: US 5331561 A

TITLE: Active cross path position correlation device

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Abstract	Claims	KWIC	Draw. De
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☐ 7. Document ID: US 5161405 A

L9: Entry 7 of 9

File: USPT

Nov 10, 1992

US-PAT-NO: 5161405

DOCUMENT-IDENTIFIER: US 5161405 A

TITLE: Clutch pedal positon sensor continuous calibration

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Abstract	Claims	KWIC	Draw. De
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☐ 8. Document ID: US 4882697 A

L9: Entry 8 of 9

File: USPT

Nov 21, 1989

US-PAT-NO: 4882697

DOCUMENT-IDENTIFIER: US 4882697 A

TITLE: Stabilization control circuit for vertical position in an inertial navigator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Abstract	Claims	KWIC	Draw. De
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☐ 9. Document ID: US 3946364 A

L9: Entry 9 of 9

File: USPT

Mar 23, 1976

US-PAT-NO: 3946364

DOCUMENT-IDENTIFIER: US 3946364 A

TITLE: Method and apparatus for sensing, storing, and graphically displaying over-temperature conditions of jet engines

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Alphabetical	Claims	KWIC	Draw. Doc
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**Search Results - Record(s) 1 through 10 of 12 returned.**☐ 1. Document ID: US 20030222820 A1**Using default format because multiple data bases are involved.**

L11: Entry 1 of 12

File: PGPB

Dec 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030222820

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030222820 A1

TITLE: Wireless location using hybrid techniques

PUBLICATION-DATE: December 4, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Karr, Charles L.	Tuscaloosa	AL	US	
Dupray, Dennis J.	Golden	CO	US	

US-CL-CURRENT: 342/457

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 2. Document ID: US 20030209893 A1

L11: Entry 2 of 12

File: PGPB

Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030209893

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030209893 A1

TITLE: Occupant sensing system

PUBLICATION-DATE: November 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Breed, David S.	Boonton Township	NJ	US	
DuVall, Wilbur E.	Kimberling City	MO	US	
Johnson, Wendell C.	Signal Hill	CA	US	

US-CL-CURRENT: 280/735; 701/45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 20030191507 A1

L11: Entry 3 of 12

File: PGPB

Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030191507

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030191507 A1

TITLE: Wheel-less walking support and rehabilitation device

PUBLICATION-DATE: October 9, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Simmons, John Castle	Germantown	TN	US	

US-CL-CURRENT: 607/48; 607/47, 607/49

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 20030187577 A1

L11: Entry 4 of 12

File: PGPB

Oct 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030187577

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030187577 A1

TITLE: Vehicle navigation system and method for swathing applications

PUBLICATION-DATE: October 2, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
McClure, John A.	Scottsdale	AZ	US	
Collins, Dennis M.	Gilbert	AZ	US	
Heiniger, Richard W.	Parkville	MO	US	

US-CL-CURRENT: 701/213; 701/207, 701/50

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 20030167121 A1

L11: Entry 5 of 12

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167121

PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030167121 A1

TITLE: Electronic compass system

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ockerse, Harold C.	Holland	MI	US	
Bechtel, Jon H.	Holland	MI	US	
Bugno, Mark D.	Stevensville	MI	US	

US-CL-CURRENT: 701/224; 33/356, 33/357

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 6. Document ID: US 20030156141 A1

L11: Entry 6 of 12

File: PGPB

Aug 21, 2003

PGPUB-DOCUMENT-NUMBER: 20030156141  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030156141 A1

TITLE: Methods and systems for navigating a workspace

PUBLICATION-DATE: August 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Good, Lance E.	Cupertino	CA	US	
Stefik, Mark J.	Portola Valley	CA	US	

US-CL-CURRENT: 715/810

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 7. Document ID: US 20030146871 A1

L11: Entry 7 of 12

File: PGPB

Aug 7, 2003

PGPUB-DOCUMENT-NUMBER: 20030146871  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030146871 A1

TITLE: Wireless location using signal direction and time difference of arrival

PUBLICATION-DATE: August 7, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Karr, Charles L.	Tuscaloosa	AL	US	
Dupray, Dennis J.	Golden	CO	US	

US-CL-CURRENT: 342/457; 342/465, 455/404.2, 455/456.5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. D
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☐ 8. Document ID: US 20030078706 A1

L11: Entry 8 of 12

File: PGPB

Apr 24, 2003

PGPUB-DOCUMENT-NUMBER: 20030078706

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030078706 A1

TITLE: Methods and systems for navigating under water

PUBLICATION-DATE: April 24, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Larsen, Mikael Bliksted	London		GB	

US-CL-CURRENT: 701/21; 701/217

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. D
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☐ 9. Document ID: US 20020177950 A1

L11: Entry 9 of 12

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177950

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177950 A1

TITLE: Satellite based on-board vehicle navigation system including predictive filtering and map-matching to reduce errors in a vehicular position

PUBLICATION-DATE: November 28, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Davies, F. Bryan	Vienna	VA	US	

US-CL-CURRENT: 701/213; 340/988, 342/357.08

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. D
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☐ 10. Document ID: US 20020098851 A1

L11: Entry 10 of 12

File: PGPB

Jul 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020098851

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020098851 A1

TITLE: Method and system for ~~validating a mobile station location fix~~

PUBLICATION-DATE: July 25, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Walczak, Thomas J.	Woodstock	IL	US	
Alberth, William P. JR.	Crystal Lake	IL	US	

US-CL-CURRENT: 455/456.5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D.
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**Search Results - Record(s) 11 through 12 of 12 returned.**

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☐ 11. Document ID: US 20020015042 A1**Using default format because multiple data bases are involved.**

L11: Entry 11 of 12

File: PGPB

Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020015042

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020015042 A1

TITLE: Visual content browsing using rasterized representations

PUBLICATION-DATE: February 7, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Robotham, John S.	Belmont	MA	US	
Johnson, Charles Lee	Newton	MA	US	
Weiss, Howard P.	Newton	MA	US	

US-CL-CURRENT: 345/581

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 12. Document ID: US 20010022558 A1

L11: Entry 12 of 12

File: PGPB

Sep 20, 2001

PGPUB-DOCUMENT-NUMBER: 20010022558

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010022558 A1

TITLE: Wireless location using signal fingerprinting

PUBLICATION-DATE: September 20, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Karr, Charles L. JR.	Tuscaloosa	AL	US	
Dupray, Dennis J.	Denver	CO	US	

US-CL-CURRENT: 342/450; 455/456.5

#	Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawn D
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Search Results - Record(s) 1 through 10 of 36 returned.

☐ 1. Document ID: US 20030225863 A1

Using default format because multiple data bases are involved.

L12: Entry 1 of 36

File: PGPB

Dec 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030225863

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030225863 A1

TITLE: Data distribution system

PUBLICATION-DATE: December 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kajino, Osamu	Kadoma		JP	
Mushika, Yoshihiro	Neyagawa		JP	

US-CL-CURRENT: [709/219](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 2. Document ID: US 20030219251 A1

L12: Entry 2 of 36

File: PGPB

Nov 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030219251

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030219251 A1

TITLE: Wireless optical system and method for point-to-point high bandwidth communications

PUBLICATION-DATE: November 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
McMurry, Sam Eric	Richardson	TX	US	
Littlejohn, Harry	Highland Village	TX	US	

US-CL-CURRENT: [398/58](#)



Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 20030218537 A1

L12: Entry 3 of 36

File: PGPB

Nov 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030218537

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030218537 A1

TITLE: Interactive modular system

PUBLICATION-DATE: November 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hoch, David	Watertown	MA	US	
Lang, Andrew Kennedy	Sherborn	MA	US	

US-CL-CURRENT: 340/524; 434/323

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 20030142750 A1

L12: Entry 4 of 36

File: PGPB

Jul 31, 2003

PGPUB-DOCUMENT-NUMBER: 20030142750

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030142750 A1

TITLE: Edge detection based on variable-length codes of block coded video

PUBLICATION-DATE: July 31, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Oguz, Seyfullah H.	Shrewsbury	MA	US	
Sezer, Ugur	Shrewsbury	MA	US	

US-CL-CURRENT: 375/240.18; 375/240.23, 375/240.24

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 20030134712 A1

L12: Entry 5 of 36

File: PGPB

Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030134712

PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030134712 A1

TITLE: Method of controlling hydraulic pressure in speed change mechanism having hydraulic clutch

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Katou, Katsunori	Osaka		JP	
Matsufuji, Mizuya	Hyogo		JP	

US-CL-CURRENT: 477/70; 477/115

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 6. Document ID: US 20030091017 A1

L12: Entry 6 of 36

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030091017  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030091017 A1

TITLE: Method for data exchange with a mobile asset considering communication link quality

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Davenport, David M.	Niskayuna	NY	US	
Laguer-Diaz, Juan	San Juan	PR	US	
Gary, Robert A.	Erie	PA	US	

US-CL-CURRENT: 370/338; 370/476

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 7. Document ID: US 20030084042 A1

L12: Entry 7 of 36

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084042  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030084042 A1

TITLE: Evaluating potential for success in sports based on comparisons between genomic sequences

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Garner, Gene M. II	Germantown	MD	US	

US-CL-CURRENT: 707/5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 8. Document ID: US 20030072374 A1

L12: Entry 8 of 36

File: PGPB

Apr 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030072374

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030072374 A1

TITLE: Method for motion vector estimation

PUBLICATION-DATE: April 17, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Sohm, Oliver P.	McKinney	TX	US	

US-CL-CURRENT: 375/240.16; 375/240.08

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 9. Document ID: US 20030070120 A1

L12: Entry 9 of 36

File: PGPB

Apr 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030070120

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030070120 A1

TITLE: Method and system for managing software testing

PUBLICATION-DATE: April 10, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Michael, Gartner Jason	Richmond Hill		CA	
Paternostro, Luiz Marcelo Aucelio	Markham		CA	
Sluiman, Harm	Scarborough		CA	

US-CL-CURRENT: 714/38

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 10. Document ID: US 20030059111 A1

L12: Entry 10 of 36

File: PGPB

Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030059111

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030059111 A1

TITLE: Scanning and detecting a number of images

PUBLICATION-DATE: March 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Druitt, Colin Eric	North Rocks		AU	
Gallagher, Matthew William	North Ryde		AU	

US-CL-CURRENT: 382/173, 358/527, 358/538, 382/282

#	Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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## Refine Search

### Search Results -

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 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

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### Search History

 DATE: Wednesday, November 17, 2004    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u> side-by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
	<i>DB=PGPB,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
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<u>L11</u>	L10 and navigat\$	12	<u>L11</u>
<u>L10</u>	(compar\$ with (recent\$ or current\$) with (previous or prior) with (location or position or coordinat\$)) and @pd<=20031208 and (forecast\$ or predict\$)	48	<u>L10</u>
	<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L9</u>	L4 not l5	9	<u>L9</u>
<u>L8</u>	L5 not l6	5	<u>L8</u>
<u>L7</u>	L6 and navigat\$	0	<u>L7</u>
<u>L6</u>	L5 and (forecast\$ or predict\$)	1	<u>L6</u>
<u>L5</u>	(compar\$ with (recent\$ or current\$) with (previous or prior) with (location or position or coordinat\$)) and l3	6	<u>L5</u>
<u>L4</u>	(compar\$ with (previous or prior) with (location or position or coordinat\$)) and l3	15	<u>L4</u>

<u>L3</u>	L2 and 701/? .ccls.	322	<u>L3</u>
<u>L2</u>	(compar\$ with (location or position or coordinat\$)) and @ad<=20031208	150366	<u>L2</u>
<u>L1</u>	(compar\$ with (location or position or coordinat\$)) and 2Ad<=20031208	150415	<u>L1</u>

END OF SEARCH HISTORY

PUBLICATION-DATE: December 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Knox, David	Point Roberts	WA	US	
Emanuel, Josh	Wayne	NJ	US	

US-CL-CURRENT: 705/39; 705/38

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 21. Document ID: US 20020176579 A1

L12: Entry 21 of 36

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020176579

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020176579 A1

TITLE: Location-based services using wireless hotspot technology

PUBLICATION-DATE: November 28, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deshpande, Nikhil M.	Beaverton	OR	US	
Reddy, Ramgopal K.	Portland	OR	US	
Chen, Timothy	Portland	OR	US	
Dohrmann, Stephen	Hillsboro	OR	US	
Knauerhase, Robert C.	Portland	OR	US	

US-CL-CURRENT: 380/270

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 22. Document ID: US 20020131500 A1

L12: Entry 22 of 36

File: PGPB

Sep 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020131500

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020131500 A1

TITLE: Method for determining a motion vector for a video signal

PUBLICATION-DATE: September 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gandhi, Bhavan R.	Vernon Hills	IL	US	

☐ 33. Document ID: DE 69533262 E, WO 9613951 A1, AU 9538189 A, US 5572221 A, EP 788720 A1, FI 9701778 A, MX 9702942 A1, AU 694575 B, KR 97707693 A, JP 10513016 W, RU 2141738 C1, MX 195045 B, CN 1170493 A, KR 361122 B, EP 788720 B1

L12: Entry 33 of 36

File: DWPI

Aug 19, 2004

DERWENT-ACC-NO: 1996-239783

DERWENT-WEEK: 200455

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TITLE: Detecting and predicting motion of mobile terminals esp cellular telephones - comparing current sequence of terminal including present and previous locations with several stored sequences which include previous locations

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 34. Document ID: EP 624034 A1, DE 3856494 G, CA 1336619 C, EP 288963 B1

L12: Entry 34 of 36

File: DWPI

Nov 9, 1994

DERWENT-ACC-NO: 1994-343579

DERWENT-WEEK: 200176

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Inter-frame coding and decoding appts. for motion image signals - uses dynamic vector quantiser with coding section and decoding section

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 35. Document ID: EP 298475 A, DE 3876157 G, EP 298475 B1, US 4982297 A

L12: Entry 35 of 36

File: DWPI

Jan 11, 1989

DERWENT-ACC-NO: 1989-009565

DERWENT-WEEK: 198902

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Feedback control system positioning magnetic head of floppy disk unit - uses mathematical algorithms to compensate for tracking error due to noise or disk corruption

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 36. Document ID: EP 288963 A, AU 8815205 A, AU 8947101 A, AU 8947102 A, AU 9172893 A, AU 9172894 A, AU 9172895 A, CA 1336619 C, DE 3854445 G, EP 288963 A3, EP 288963 B1, JP 01018382 A, JP 01034066 A, JP 01034087 A, JP 01105681 A, JP 01174182 A, JP 63269882 A, JP 63310292 A, US 4933761 A

L12: Entry 36 of 36

File: DWPI

Nov 2, 1988



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L8: Entry 3 of 5

File: USPT

Jun 3, 2003

DOCUMENT-IDENTIFIER: US 6573888 B2

TITLE: Image control system controlling traffic of a mobile body, such as an aircraft

Application Filing Date (1):  
20001207Brief Summary Text (17):

Herein, the image on the display screen may be watched as a plurality of reduced viewing area images from the angle positions in comparison with that watched from the front position. In this case, the image modifying means comprises storage means for storing the reduced viewing area images, selecting means for successively selecting the reduced viewing area images on the basis of the position information as a selected viewing area image, and means for producing the selected viewing area image as the modified image.

Detailed Description Text (6):

Referring to FIG. 2 in addition to FIG. 1, the above-operation will be described more in detail. In FIG. 2, the position of the air traffic controller is detected as position data at a step A1 by the magnetic three dimensional position sensor 1 (step A1). The detected position data or information is transmitted as a current position detection signal to the display renewal judgement portion 2 and is stored therein (step A2). The display renewal judgement portion 2 stores a previous position detection signal concerned with a previous position of the air traffic controller. Under the circumstances, the display renewal judgement portion 2 calculates an amount of movement of the air traffic controller by comparing both the previous position detection signal with the current position detection signal and produces a movement amount signal d representative of a difference or deviation between the previous and the current positions (step A3).

Detailed Description Text (9):

When the current comparison result signal is identical with the previous comparison result signal, the air traffic controller does not move from a previous position, namely, is in the stationary state by the display renewal judgement portion 2, processing is returned back to the step A3, as shown in FIG. 2. In consequence, the next following movement amount is calculated by the display renewal judgement portion 2.

Detailed Description Text (18):

Herein, it is often preferable that the image on the screen seen from a plurality of angle positions is identical with the image seen from the predetermined front position. On the other hand, when the image is seen from an inclined position, a visible image area on the screen is reduced in comparison with the image area seen from the front position of the screen. Alternatively, it is preferable that the air traffic information displayed as the image would be changed to another information with reference to the position of the air traffic controller.

Detailed Description Text (20):

The second memory 42 stores a shaped image of the newest air traffic control information in consideration of the case where the image on the screen is reduce

when the image is watched from an oblique position in comparison with that seen from the front position. The shaped image may be reduced in an amount of information and may be prepared at every angle. As a result, the shaped image is displayed as a reduced viewing area image. At any rate, the second memory 42 is operable to compensate for a reduction of a display areas of the display portion 5 in cooperation with the processing unit 44. In this case, the processing unit 44 is helpful to select the reduced viewing area image and to send the same to the display portion 5 and a combination of the second memory 42 and the processing unit 44 may be called a second circuit.

Current US Cross Reference Classification (6):

701/3

CLAIMS:

12. An image control system as claimed in claim 10, the image on the display screen being watched as a plurality of reduced viewing area images from the angle positions in comparison with that watched from the front position, wherein the image modifying means comprises: storage means for storing the reduced viewing area images; and selecting means for successively selecting the reduced viewing area images on the basis of the position information as a selected viewing area image; and means for producing the selected viewing area image as the modified image.

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L8: Entry 3 of 5

File: USPT

Jun 3, 2003

US-PAT-NO: 6573888

DOCUMENT-IDENTIFIER: US 6573888 B2

TITLE: Image control system controlling traffic of a mobile body, such as an aircraft

DATE-ISSUED: June 3, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hayashi; Keiko	Tokyo			JP
Shiomi; Kakuichi	Tokyo			JP

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
NEC Corporation	Tokyo			JP		03
Electronic Navigation Research Institute, Independent Administrative Institution	Tokyo			JP		03

APPL-NO: 09/ 731583 [\[PALM\]](#)

DATE FILED: December 7, 2000

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	11-348349	December 8, 1999

INT-CL: [07] [G09 G 3/36](#), [G09 G 5/08](#), [G01 S 3/02](#), [G05 D 1/00](#)

US-CL-ISSUED: 345/204; 345/97, 345/109, 345/156, 345/158, 342/455, 701/3

US-CL-CURRENT: [345/204](#); [342/455](#), [345/109](#), [345/156](#), [345/158](#), [345/97](#), [701/3](#)

FIELD-OF-SEARCH: 345/97, 345/98, 345/109, 345/156, 345/158, 345/204, 345/507, 345/515, 345/516, 345/841, 348/36, 348/39, 348/51, 700/79, 340/468, 340/961, 342/53, 342/455, 367/68-72, 701/1-16

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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ISSUE-DATE

PATENTEE-NAME

US-CL

[4592053](#)

May 1986

Matsuura

700/79

<input type="checkbox"/>	<u>4914734</u>	April 1990	Love et al.	342/53
<input type="checkbox"/>	<u>5732384</u>	March 1998	Ellert et al.	345/841
<input type="checkbox"/>	<u>5742331</u>	April 1998	Uomori et al.	345/156
<input type="checkbox"/>	<u>6314362</u>	November 2001	Erzberger et al.	340/961
<input type="checkbox"/>	<u>6411874</u>	June 2002	Morgan et al.	340/468

ART-UNIT: 2673

PRIMARY-EXAMINER: Shalwala; Bipin

ASSISTANT-EXAMINER: Dharia; Prabodh

ATTY-AGENT-FIRM: Dickstein, Shapiro, Morin & Oshinsky, LLP.

ABSTRACT:

In an air traffic control system for controlling aircraft a three-dimensional position is provided to monitor a position of an air traffic controller. An image is displayed on a display portion with reference to the position of the controller. The image displayed on the display portion always appears in a front image regardless of the position of the controller or may be selected to be displayed on a selected area of the display portion determined by the position of the controller.

20 Claims, 5 Drawing figures

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☒ 1. Document ID: US 6813545 B2

L8: Entry 1 of 5

File: USPT

Nov 2, 2004

US-PAT-NO: 6813545

DOCUMENT-IDENTIFIER: US 6813545 B2

TITLE: Automatic traffic sign recognition

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWC	Draw D
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☐ 2. Document ID: US 6587040 B2

L8: Entry 2 of 5

File: USPT

Jul 1, 2003

US-PAT-NO: 6587040

DOCUMENT-IDENTIFIER: US 6587040 B2

TITLE: Emergency call system provided with theftproof function

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWC	Draw D
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☐ 3. Document ID: US 6573888 B2

L8: Entry 3 of 5

File: USPT

Jun 3, 2003

US-PAT-NO: 6573888

DOCUMENT-IDENTIFIER: US 6573888 B2

TITLE: Image control system controlling traffic of a mobile body, such as an aircraft

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWC	Draw D
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☐ 4. Document ID: US 6519527 B2

L8: Entry 4 of 5

File: USPT

Feb 11, 2003

US-PAT-NO: 6519527

DOCUMENT-IDENTIFIER: US 6519527 B2

TITLE: Navigation assisting system, flight-route calculating method, and navigation assisting method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 5719566 A

L8: Entry 5 of 5

File: USPT

Feb 17, 1998

US-PAT-NO: 5719566

DOCUMENT-IDENTIFIER: US 5719566 A

TITLE: Method and apparatus for detecting dormant actuator failure

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw. De
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L9: Entry 1 of 9

File: USPT

Nov 26, 2002

DOCUMENT-IDENTIFIER: US 6487495 B1

TITLE: Navigation applications using related location-referenced keywords

Application Filing Date (1):20000602Detailed Description Text (158):

Entire classes of keywords can be registered this way. For example, a police reporting system for accident reports can reserve a class of keywords "PATROL\_001", "PATROL\_002", etc. These keywords are not associated at the time of registration but are reserved. Then, when a police patrol responds to accident reports, the location of each accident is associated with one of the reserved keywords. A navigation system or GPS system in the police officer's vehicle may be used to automatically send the accident location to the keyword service provider so that the location can automatically be associated with the next available reserved keyword. Indicating locations in this manner has numerous advantages compared to prior methods in which the police office physically wrote down accident locations.

Current US Cross Reference Classification (5):701/3[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

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L9: Entry 6 of 9

File: USPT

Jul 19, 1994

DOCUMENT-IDENTIFIER: US 5331561 A

TITLE: Active cross path position correlation device

Application Filing Date (1):19920423Brief Summary Text (8):

A ring laser gyro system, developed by Honeywell, Inc. Systems and Research Center in cooperation with the Advanced Systems Center of Honeywell's Defense Systems Division, determined waypoints along a driven path using a ring-laser-gyro-based inertial navigator. During a training drive by a vehicle, the system recorded the waypoints. After the completion of the learning path drive, the vehicle retraced the learned path by comparing its real-time, inertially-derived location with the previously recorded waypoints. The system caused the vehicle to move in a direction so as to minimize the difference obtained by the comparison. This system had a typical error of approximately one foot over a path of approximately 1000 feet and suffered from an unbounded error growth.

Brief Summary Text (13):

The present invention solves the problems described above by utilizing correlation techniques to compare position data gathered by a follower (subsequent) vehicle with position data received from a lead (initial) vehicle and to control the follower vehicle based upon the results of this correlation so that it tracks the lead vehicle's path. The lead vehicle gathers position data using on-board active radiation sources, such as light emitting diodes, as it traverses a road. A system on-board the lead vehicle creates a data file of this position information and tags each record in the data file to indicate the relative position along the road at which the lead vehicle gathered the data. The lead vehicle's system transmits the data to a follower vehicle.

Brief Summary Text (14):

The follower vehicle gathers its own position information and its system compares this information with the position information in the data file sent by the lead vehicle. The tagging of the records indicates to the follower the time (location) at which the system should correlate gathered position data with position data in a particular record of the data file. The follower vehicle's system continuously correlates gathered data with received position data to control the follower vehicle so that it tracks the lead vehicle along the desired path. This continuous process of correlation prevents both large position errors and the increasing of position errors over time. ✓

Detailed Description Text (28):

FIG. 6 is a flow chart showing a preferred sequence of operations for recording a side range profile of the follower vehicle. The sequence of operations is similar to the lead vehicle's side range profile generation. The follower vehicle's system also operates at a typical frequency of 100 Hz, which is a sufficiently high rate to avoid missing small objects. At step 220, the system measures the distance between the follower vehicle and objects on one or more sides of the vehicle. At step 221, the system estimates along-path position using an odometer or other type of position sensor. The system compares the new gathered position data with



previous position data at step 222, and, if necessary, stores the new position data at step 223.

Detailed Description Text (40):

The alternate embodiment requires the following modifications to the embodiment described above to replay a path recorded at a previous time. First, the lead vehicle, which is now the recording vehicle, should save its estimate of speed at each recorded data point, in addition to the other parameters described above. For each recorded data point, the follower vehicle's desired speed will preferably be the speed of the recording vehicle at the same point along the path. Second, a more sophisticated clutter-rejection filter should be used with the data gathering sensors to ignore new or missing objects in a relatively uncontrolled environment. For example, a parked car may be added to or removed from the scene between the times that the recording and follower vehicles traverse the path. Finally, the follower may comprise an obstacle-avoidance sensor to account for obstructions that are added to the path. This sensor is typically not required in the preferred embodiment because, in comparison, it is reasonably safe to assume in a same-time setting that no obstructions appear in the short time interval after the lead vehicle passes but before the follower vehicle arrives at a particular location.

Current US Cross Reference Classification (3):

701/1

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